I CLAIM:

- 1. A food supplement comprising a substance which increases nitric oxide production in the body, and, a source of amino acids.
- A food supplement according to claim 1 wherein the substance
 which increases nitric oxide production is selected from the group consisting of glycosidal saponins, ginseng, l-arginine, N-acetyl cysteine, and folic acid.
 - 3. A food supplement according to claim 2 wherein the substance is ginseng.
- 4. A food supplement which comprises a substance which can enhance and/or mimic insulin activity, and a source of amino acids.
 - 5. A food supplement according to claim 4 wherein the substance is glucomannan.
- 6. A food supplement according to claim 4 wherein the substance is selected from the group consisting of N-acetyl cysteine, myo-inositol, cis-inositol, epi-inositol, allo-inositol, muco-inositol, neo-inositol, scyllo-inositol, d-chiro-inositol, l-chiro-inositol, and d-pinitol.
 - 7. A food supplement according to claim 6 wherein the substance is myo-inositol.
- 20 8. A supplement which increases nitrogen retention in the body comprising a substance which increases nitrogen retention and a source of amino acids.
 - 9. A supplement according to claim 8 wherein the substance

which increases nitrogen retention in the body is selected from the group consisting of glucomannan and l-arginine.

- 10. A supplement according to claim 9 wherein the substance is glucomannan.
- 5 11. A supplement comprising a glycosidal saponin, glucomannan D-chiro-inositol, myo-inositol, and a source of amino acids.
 - 12. A supplement comprising a glycosidal saponin, glucomannan myo-inositol, and a source of amino acids.
- 13. A supplement according to any one of claims 1 to 12 wherein
 10 the source of amino acids is selected from the group consisting of WPI 97, Whey Peptides, WPC 80, ION EXCHANGE, lactoferrin, and whey protein.
 - 14. A food supplement comprising a substance which increases nitric oxide production in the body, and, whey protein.
- 15 15. A supplement according to claim 14 wherein the whey protein is WPI 97, Whey Peptides, WPC 80, or ION EXCHANGE whey protein.
 - 16. A supplement according to claim 14 wherein the whey protein is a combination of two or more of WPI 97, Whey Peptides, WPC 80, or ION EXCHANGE whey protein.
- 20 17. A food supplement according to claim 14 wherein the substance which increases nitric oxide production is selected from the group consisting of glycosidal saponins, ginseng, l-arginine, N-acetyl cysteine and folic acid.

- 18. A food supplement according to claim 17 wherein the substance is ginseng.
- 19. A food supplement comprising 1mg-3000 mg glycosidal saponins; 1mg-2000mg myo-inositol; 1mg-2000mg d-chiro-inositol; 10mg-4000mg glucomannan; and a source of amino acids.
- 20. A food supplement according to claim 19 wherein the glycosidal saponins comprise 150mg to 1500mg; the myo-inositol comprises about 100mg to 2000mg; and the glucomannan comprises 25 mg to 2000mg.

10

- 21. A food supplement according to claim 19 wherein the glycosidal saponins comprise 50mg to 500mg; the myo-inositol comprises about 200mg to 1000mg; and the glucomannan comprises 50mg to 1000mg.
- 22. A food supplement according to claim 19 wherein the glucomannan comprises 100mg to 500mg.
 - 23. A food supplement according to claim 19 wherein the glycosidal saponins comprise about 50mg.
 - 24. A food supplement according to anyone of claims 19-23 wherein the source of amino acids is whey protein.
- 25. A method for supplementing the diet of an athlete, comprising administering to the diet of the athlete an effective amount of a supplement comprising a substance which increases nitric oxide production in the body and a source of amino acids.
- 26. A method according to claim 25 wherein the substance25 which increases nitric oxide production is selected from the group

consisting of glycosidal saponins, ginseng, l-arginine, N-acetyl cysteine, and folic acid.

- 27. A method according to claim 26 wherein the substance is ginseng.
- 28. A method for supplementing the diet of an athlete, comprising administering to the diet of the athlete an effective amount of a supplement comprising a substance which can enhance and/or mimic insulin activity, and a source of amino acids.
- 29. A method according to claim 28 wherein the substance is glucomannan.
 - 30. A method according to claim 28 wherein the substance is selected from the group consisting of N-acetyl cysteine, myo-inositol, cis-inositol, epi-inositol, allo-inositol, muco-inositol, neo-inositol, scyllo-inositol, d-chiro-inositol, l-chiro-inositol, and d-pinitol.
- 15 31. A method according to claim 30 wherein the substance is myoinositol.
 - 32. A method according to claim 31, wherein the supplement is administered to the diet of the athlete on a daily basis.
- 33. A method according to claim 32, wherein the food supplement is mixed with water to provide a liquid drink.
 - 34. A method for increasing muscle mass and or strength of an individual, comprising administering to the diet of the athlete an effective amount of a supplement a substance which increases nitric oxide production in the body and a source of amino acids.

- 35. A method according to claim 34 wherein the the substance which increases nitric oxide production is selected from the group consisting of glycosidal saponins, ginseng, l-arginine, N-acetyl cysteine, and folic acid.
- 5 36. A method according to claim 35 wherein the substance is ginseng.
 - 37. A method for increasing muscle mass and or strength of an individual comprising administering to the diet of the athlete an effective amount of a supplement comprising a substance which can enhance and/or mimic insulin activity, and a source of amino acids.

10

- 38. A method according to claim 37 wherein the substance is glucomannan.
- 39. A method according to claim 37 wherein the substance is selected from the group consisting of N-acetyl cysteine, myo-inositol, cis-inositol, epi-inositol, allo-inositol, muco-inositol, neo-inositol, scyllo-inositol, d-chiro-inositol, l-chiro-inositol, and d-pinitol.
- 40. A method according to claim 39 wherein the substance is myo-inositol.
- 41. A method according to claim 40 wherein the supplement is administered to the diet of the athlete on a daily basis.
 - 42. A method according to claim 41 wherein the food supplement is mixed with water to provide a liquid drink.
 - 43. A method for supplementing the diet of an athlete, comprising

administering to the diet of the athlete an effective amount of a supplement comprising a substance which increases nitric oxide production in the body andwhey protein.

44. A method according to claim 43 wherein the the substance which increases nitric oxide production is selected from the group consisting of glycosidal saponins, ginseng, l-arginine, N-acetyl cysteine, and folic acid.

- 45. A method according to claim 44 wherein the substance is ginseng.
- 46. A method for supplementing the diet of an athlete, comprising administering to the diet of the athlete an effective amount of a supplement comprising a substance which can enhance and/or mimic insulin activity, and whey protein.
- 47. A method according to claim 46 wherein the substance is glucomannan.
 - 48. A method according to claim 46 wherein the substance is selected from the group consisting of N-acetyl cysteine, myo-inositol, cis-inositol, epi-inositol, allo-inositol, muco-inositol, neo-inositol, scyllo-inositol, d-chiro-inositol, l-chiro-inositol, and d-pinitol.
- 20 49. A method according to claim 48 wherein the substance is myoinositol.
 - 50. A method according to claim 48, wherein the supplement is administered to the diet of the athlete on a daily basis.
 - 51. A method according to claim 50, wherein the food supplement

is mixed with water to provide a liquid drink.

- 52. A method for supplementing the diet of an athlete, comprising administering to the diet of the athlete an effective amount of a supplement comprising 1mg-3000 mg glycosidal saponins; 1mg-2000mg myo-inositol; 1mg-2000mg d-chiro-inositol; 10mg-4000mg glucomannan; and a source of amino acids.
- 53. A method according to claim 52 wherein the glycosidal saponins comprise 150mg to 1500mg; the myo-inositol comprises about 100mg to 2000mg; and the glucomannan comprises 25 mg to 2000mg.
- 54. A method according to claim 52 wherein the glycosidal saponins comprise 50mg to 500mg; the myo-inositol comprises about 200mg to

1000mg; and the glucomannan comprises 50mg to 1000mg.

- 55. A method according to claim 52 wherein the glucomannan comprises 100mg to 500mg.
 - 56. A method according to claim 52 wherein the glycosidal saponins comprise about 50mg.
 - 57. A method according to anyone of claims 52-56 wherein the source of amino acids is whey protein.

10